

Claims

1. A hot plate wherein a resistance element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on an insulating substrate.
2. The hot plate according to claim 1, wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.
3. The hot plate according to claim 1 or 2, wherein the thickness of said resistance element is from 0.5 to 500 μm .
4. The hot plate according to claim 3, wherein the thickness of said resistance element is from 1 to 10 μm .
5. The hot plate according to any of claims 1 to 4, wherein said insulating substrate is at least one kind selected from a nitride ceramic, a carbide ceramic and a resin.
6. The hot plate according to any of claims 1 to 5, wherein said resistance element is made of scaly noble metal powder.
7. The hot plate according to any of claims 1 to 6, characterized in that said resistance element has a multilayer structure, and among a plurality of layers constituting said resistance element, the layer nearest to the substrate is made of titanium or chromium.
8. The hot plate according to any of claims 1 to 7, characterized in that said resistance element is composed of a first layer made of titanium; a second layer made of molybdenum and having a larger thickness than said first layer, on said first layer; and a third layer made of nickel and having an intermediate thickness between the thickness of said first layer and that of said second layer, on said second layer.

9. The hot plate according to any of claims 1 to 8, characterized in that said resistance element is composed of a titanium layer having a thickness of 0.1 to 0.5 μm , a molybdenum layer having a thickness of 0.5 to 7.0 μm , on said titanium layer, and a nickel layer having a thickness of 0.4 to 2.5 μm , on said molybdenum layer.
10. A process for producing a hot plate wherein a resistance element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on an insulating substrate, characterized by forming said resistance element by a film-depositing method based on a dry process.
- 15 11. A process for producing a hot plate wherein a resistance element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on an insulating substrate, characterized by forming said resistance element by RF sputtering.
- 20 12. A process for producing a hot plate wherein a resistance element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on an insulating substrate, characterized by printing a resistance element paste made of scaly noble metal powder and firing the paste.
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